

In the Claims:

1. (Currently amended) A method of setting up multimedia calls from a (telephone) first terminal (T1) to a second terminal (T2) connected to an IP network, ~~the method being characterized in that~~ wherein, in order to set up a call to the second terminal (T2) from the first terminal (T1), the method comprises:

the first terminal (T1) sends to a connection server (SMR) a call request (DA) containing a predetermined (called party) second identifier (ID2) for the second terminal (T2);

on receiving the call request (DA), the connection server (SMR) temporarily stores the (called party) second identifier (ID2) in a correspondence table (TC) in association with a first number (NT) determined from the call request (DA) and instigates the sending by the first terminal (T1) of an incoming call (AE) to a particular second number (NS) which is a service number connecting to a call set-up gateway (PEA), the incoming call (AE) including a call characteristic (CAR) to indicate a relationship between the first number (NT) and the (service) second number (NS); and

the call set-up gateway (PEA) signals at least the characteristic (CAR) of the received incoming call (AE) to the connection server (SMR), which determines the (called party) second identifier (ID2) associated in the correspondence table (TC) with the first number (NT) corresponding to the signaling (SAE) of the characteristic (CAR) of the incoming call (AE) in order to signal the incoming call to the second terminal (T2) corresponding to the (called party) second identifier (ID2) determined in this way, in order to set up a multimedia communications channel between the second terminal (T2) and the call set-up gateway (PEA), which then connects the multimedia communications channel to the incoming call.

2. (Currently amended) A call set-up method according to claim 1, ~~characterized in that~~ wherein the first number (NT) and the (service) second number (NS) are telephone numbers.

3. (Currently amended) A call set-up method according to claim 1, ~~either of the preceding claims, characterized in that~~ wherein the (telephone) first terminal (T1) is a GPRS mobile telephone terminal.

4. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the second terminal (T2) is connected beforehand to the connection server (SMR) using a presence management protocol.

5. (Currently amended) A call set-up method according to claim 4, ~~characterized in that~~ wherein the (called party) second identifier (ID2) is selected on the first terminal (T1), selection of the (called party) second identifier (ID2) on the first terminal (T1) being possible because the presence of the second terminal (T2) has been detected and signaled to the first terminal (T1) by the connection server (SMR).

6. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the first number (NT) associated in the correspondence table (TC) with the second identifier (ID2) is the telephone number (N1) of the first terminal (T1) contained in the call request (DA) and the characteristic (CAR) of the incoming call (AE) for indicating a relationship between the first number (NT) and the (service) second number (NS) designates the incoming call (AE(N1→N)) coming from the telephone number (N1) of the first terminal (T1) and going to the (service) second number (NS).

7. (Currently amended) A call set-up method according to claim 1, ~~any one of claims 1 to 5, characterized in that~~ wherein the first number (NT) associated in the correspondence table (TC) with the second identifier (ID2) is the telephone number (N1) of the first terminal (T1) contained in the call request (DA) and the characteristic (CAR) of the incoming call (AE) for indicating a relationship between the first number (NT) and the (service) second number (NS) designates the incoming call (AE(N1→N)) coming from the telephone number (N1) of the first terminal (T1) and going to the (service) second number (NS).

8. (Currently amended) A call set-up method according to claim 1, ~~any one of claims 1 to 5, characterized in that~~ wherein the first number (NT) associated in the correspondence table (TC) with the second identifier (ID2) is the (service) second number (NS) and the characteristic (CAR) of the incoming call (AE) for indicating a relationship between the first number (NT) and the (service) second number (NS) designates the (service) second number (NS).

9. (Currently amended) A call set-up method according to claim 8, ~~characterized in that~~ wherein the telephone number (N1) of the first terminal (T1) is contained neither in the call request (DA) nor in the incoming call (AE).

10. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the connection server (SMR) determines the (service) second number (NS) from a pre-stored list (LNS) of service numbers available for the call request (DA) and is communicated to the first terminal (T1) in an acknowledgement (ACK) sent by the connection server (SMR) after the (called party) second identifier (ID2) is stored in the correspondence table (TC).

11. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the incoming call (AE) contains other characteristics of the communications channel (CC) to be set up which are also signaled with the incoming call (AE) to the connection server (SMR) and to the second terminal (T2).

12. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein a first identifier (ID1) of the first terminal (T1) is present in the call request (DA) and is stored by the connection server (SMR) in association with the (called party) second identifier (ID2) and the first number (NT).

13. (Currently amended) A call set-up method according to claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the identifier (ID1, ID2) is different from a telephone number of the corresponding terminal (T1, T2).

14. (Currently amended) Apparatus for implementing the method according to claim 1, ~~any preceding claim~~ for setting up multimedia calls from a (telephone) first terminal (T1) to a second terminal (T2) connected to an IP network, wherein the apparatus ~~being characterized in that it~~ comprises:

a gateway (PEA) for setting up calls between the first and second terminals (T1, T2);

a connection server (SMR) including means for receiving a call request (DA) from the first terminal (T1) and means for commanding the first terminal (T1) to send an incoming call (AE) to a particular second number (NS) which is a service number connecting through to the call set-up gateway (PEA), the incoming call (AE) including a call characteristic (CAR) for indicating a relationship between a first number (NT) and the (service) second number (NS);

a correspondence table (TC) for storing the (called party) second identifier (ID2) for the second terminal (T2) contained in the call request (DA) in association with the first number (NT) determined from the call request (DA);

first means in the call set-up gateway (PEA) for signaling at least the characteristic (CAR) of the incoming call (AE) to the connection server (SMR);

means in the connection server (SMR) for determining the (called party) second identifier (ID2) associated in the correspondence table (TC) with the first number (NT) corresponding to the signaling (SAE) of the characteristic (CAR) of the incoming call (AE) and second means for

signaling the incoming call to the second terminal (T2) corresponding to the (called party) second identifier (ID2) determined in this way;

means for instigating the setting up of a multimedia communications channel between the second terminal (T2) and the call set-up gateway (PEA); and

means for connecting the multimedia communications channel to the incoming call via the call set-up gateway (PEA).

15. (New) A connection server for implementing the method of claim 1, comprising:

receiver means adapted to receive from a first terminal (T1) a call request (DA) containing a predetermined (called party) second identifier (ID2) for the second terminal (T2);

storage means adapted to store the (called party) second identifier (ID2) in a correspondence table (TC) in association with a first number (NT) determined from the call request (DA);

receiver means adapted to receive from a call set-up gateway (PEA) at least the characteristic (CAR) of an incoming call (AE) received by said gateway, the incoming call (AE) including a call characteristic (CAR) for indicating a relationship between the first number (NT) and the (service) second number (NS); and

determination means adapted to determine the (called party) second identifier (ID2) associated in the correspondence table (TC) with the first number (NT) corresponding to the signaling (SAE) of the characteristic (CAR) of the incoming call (AE), in order to signal the incoming call to the second terminal (T2) corresponding to the (called party) second identifier (ID2) determined in this way.

16. (New) A call set-up gateway (PEA) for implementing the method of claim 1, comprising:

receiver means adapted to receive from a terminal (T1) an incoming call (AE) to a particular (service) second number (NS), the incoming call (AE) including a call characteristic (CAR) for indicating a relationship between a first number (NT) and a (service) second number (NS);

signaling means adapted to signal at least the characteristic (CAR) of the received incoming call (AE) to a connection server (SMR) that determines the (called party) second identifier (ID2) associated in a correspondence table (TC) with the first number (NT) corresponding to the signaling (SAE) of the characteristic (CAR) of the incoming call (AE).

17. (New) A second terminal (T2) for implementing the method of claim 1, comprising:

receiver means adapted to receive signaling of an incoming call coming from a first terminal (T1); and

means adapted to set up a multimedia communications channel with a call set-up gateway (PEA) which then connects the multimedia communications channel to the incoming call.